

# Improving Elective Surgery Cancellations: A Quality Improvement Project

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## Background

### Elective Surgery Cancellations (ESCs)

- Range from 1% to 26%
- 60% are preventable
- Standardized perioperative processes result in <2% ESCs
- Cost ≈ \$4,800 per cancellation
- Preventable ESCs result from:
  - Patient level factors
  - Organizational level factors

### ESCs cause:

- Anxiety and frustration
- Loss of operating room (OR) productivity
- Decreased OR utilization
- Wasted OR resources
- Increased healthcare cost

## Purpose Statement

- Identify factors associated with preventable ESCs
- Develop recommendations to mitigate preventable factors

## Significance of the Project

- Decrease ESCs rate
- Improve perioperative care
- Improve patient and provider experience
- Decrease healthcare cost
- Develop guidelines for other institutions

## Theoretical PDSA Framework

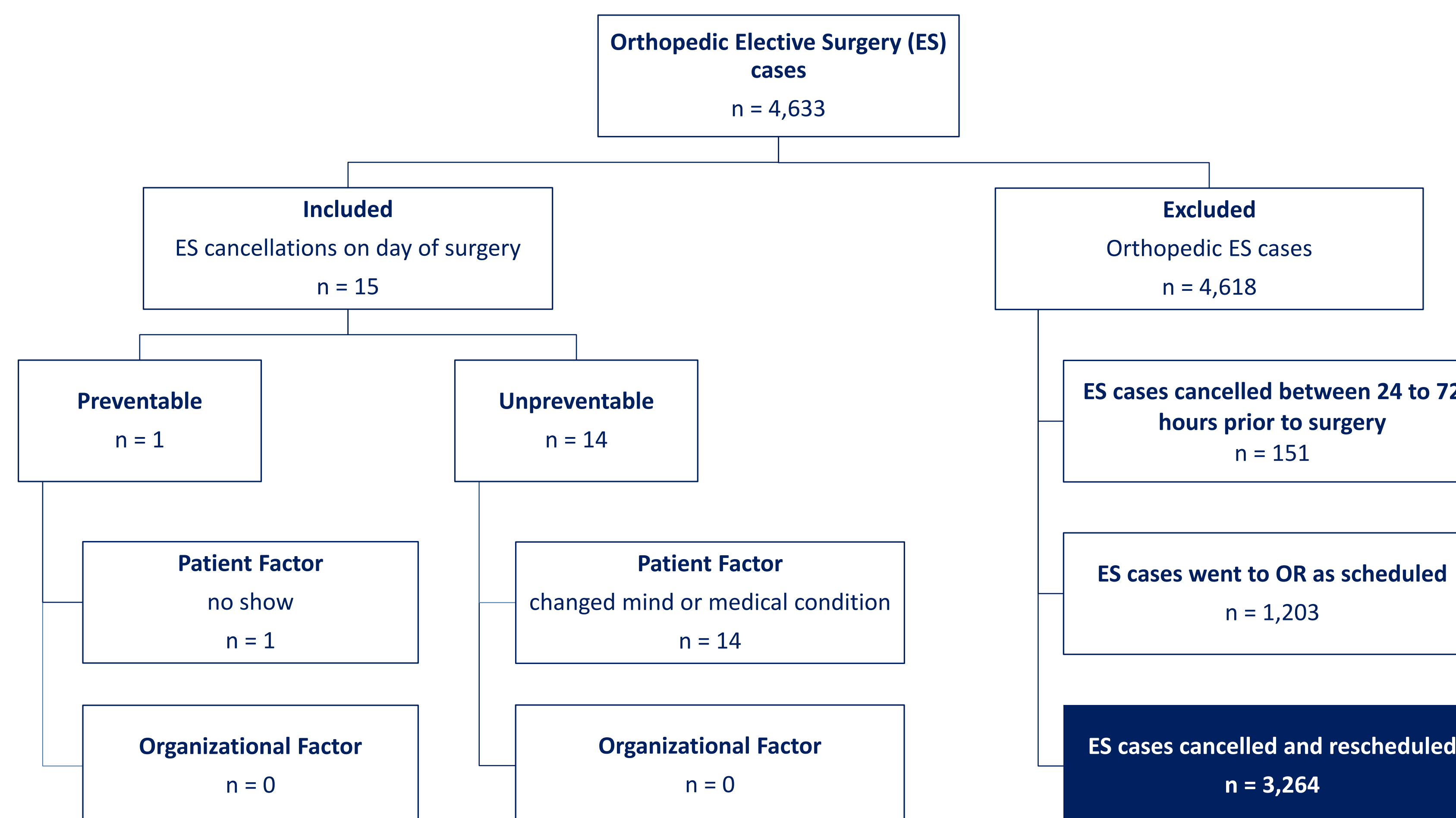


- Plan**
  - Review literature
  - Identify stakeholders
  - Develop data abstract tools
- Do**
  - Abstract data from electronic health record
- Study**
  - Analyze data and describe results
- Act**
  - Develop stakeholders' recommendations report

## Methods

- Retrospective chart review of orthopedic ESCs on day of surgery from January 1, 2015 to December 31, 2015
  - Preventable/unpreventable patient level factors
  - Preventable/unpreventable organizational level factors
- Magnet designated Level 1 trauma academic teaching facility
- Patients 18 years and older

## Results



## Results

- 4,633 elective surgery cases scheduled
- 1,203 (26%) cases had surgeries
- 151 (3%) cases cancelled more than 24 hours prior to surgery
- 15 (1%) cancelled on day of surgery
- **3,264 (70%) cases cancelled and rescheduled more than once**

## Discussion

**No organizational level factors identified**

### Patient level factors:

- 14 unpreventable (change in medical conditions)
- 1 preventable (no show)

### Cost

- ≈ \$4,800 per cancellation
- ≈ \$72,000 for 15 ESCs

### 3,415 (73 %) ES cases

- Cancelled 24 hours prior DOS
- Cancelled and rescheduled at least once

## Recommendations

- **Develop procedures to prevent cases from being cancelled and rescheduled more than once**
- PDSA cycle useful for quality improvement

